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10/812,648	03/29/2004	José Ramirez II	1020P18387	3409

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KACVINSKY LLC
C/O INTELLEVATE
P.O. BOX 52050
MINNEAPOLIS, MN 55402

EXAMINER

FOUD, HICHAM B

ART UNIT	PAPER NUMBER
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2619

MAIL DATE	DELIVERY MODE
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02/22/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/812,648

Applicant(s)

RAMIREZ ET AL.

Examiner

Hicham B. Foud

Art Unit

2619

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 November 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 6-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-8, 10-13 and 15-19 is/are rejected.
- 7) ☒ Claim(s) 9 and 14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. The amendment filed on 11-28-2007 has been entered and considered.

Claims 1-4 and 6-19 are pending in this application.

Claims 5 and 20 have been canceled.

Claims 1-4 and 6-8, 10-13 and 15-19 remain rejected as discussed below.

Claims 9 and 14 are objected.

Specification

2. The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code (in page 3 line 2 of the amendments to the specification). Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01.

Claim Objections

3. Claims 9 and 14 are objected to because of the following informalities:

Claim 9 lines 7 and 8, the term "a physical layer block" seems to refer back to "a physical layer block" mentioned in line 6. If so, it is suggested that the terms in lines 7 and 8 change to "the physical layer block". Also, the term "a physical layer block" in line 9 seems to be different than the ones mentioned before. If so, it is suggested to change that term to "another physical layer block". Similar problems occur in claim 14.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-3, 17 and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Kuffner (US 2003/0235167).

For claim 1, Kuffner discloses an apparatus, comprising: a radio comprising two or more physical layer blocks (See Figure 1 elements 102, 104 and 106 “Communication Resource”); a configuration processor to arrange the two or more physical layer blocks to communicate according to one of at least two or more radio communication protocols (see Figure 1 element 110 “System Manager” and paragraph 0013); and beacon transceiver to transmit a beacon to a remote device (see Figure 4 elements 310 or 350 “Transceiver”), wherein a beacon transmitted by said beacon transceiver provides an indication of the one or more available radio communication protocols (see Figure 4 “User-Defined modes”, See Figure 6 boxes 602 and 610 and see paragraph 0032 lines 3-5; user configures the available communication resources; inherently the user receives a beacon that has information about the availability of the communication resources, also see [0015] lines 1-6; wherein the measured or received signal quality reads on the beacon signal).

For claims 2 and 17, Kuffner discloses an apparatus, said two or more physical layer blocks including software defined radio logic block being programmable to cause

the two or more physical layer blocks to be arranged to communicate according to at least one or two or more radio communication protocols (see Figure 1, the connection between System Manager (110) and Communication resource (102, 104 and 106) by the configuration control and see Figure 2 element SDR "software defined receiver).

For claims 3 and 18, Kuffner discloses an apparatus, further comprising a memory having a database stored thereon, the database including information to configure the two or more physical layer blocks to communicate according to one of the at least two or more radio communication protocols (see Figure 1, "deployment Rules" and System Manager (110); inherently, the system manager must have a memory to save the deployment rules to execute them and see Paragraph 0036; the suggestion of the use of RAM or ROM).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 6, 7, 11 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Phillips (US 6,188,898).

Claims 6 and 11, Phillips discloses a method, comprising: transmitting from a beacon transceiver to a remote device, wherein a beacon transmitted by said beacon transceiver provides an indication of the one or more available radio communication protocols(see column 3 lines 20-23; the base stations also provides a beacon function);

receiving from the remote device a reply to a transmitted beacon, the reply indicating a desired radio communication protocol (see column 3 lines 20-25; the system may provide access to mobile terminals using the GSM 900, DECT and DCS 1800 protocols, inherently, the mobile has to reply with the desired protocol to communicate with the base station, otherwise how would the base station know the right protocol to use); determining whether the desired radio communication protocol is supported and in the event the desired radio communication protocol is supported, programming a physical layer block to communicate according to the desired radio communication protocol (see column 56-64; when the protocol has been identified, the corresponding software package is retrieved and downloaded. The details of the mobile terminal are then checked to ensure that the terminal is registered and the call is set up according to the desired protocol).

For claims 7 and 12, Phillips discloses a method, further comprising, if the desired communication protocol is not supported, determining whether a download of the desired radio communication protocol is available, and if available, downloading the desired radio communication protocol and programming the radio to communicate according to the desired radio communication protocol (see column 56-64; when the protocol has been identified, the corresponding software package is retrieved and downloaded. The details of the mobile terminal are then checked to ensure that the terminal is registered and the call is set up according to the desired protocol).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 4, 16 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuffner in view of Allison et al (US 6,167,032).

For claim 4, Kuffner discloses all the subject matter with the exception of further comprising a hub, and said radio including at least one or more media access control blocks to couple to a network through said hub. However, Allison et al teaches an Ethernet MAC chip that couples to a network (Ethernet physical layer) through a hub (Ethernet interface) (see Figure 1; element 16 "Ethernet MAC chip, element 12 "Ethernet physical layer" and element 34 "Ethernet interface"). Thus, it would have been obvious to the one skill in the art at the time of the invention to use the teaching of Allison et al into the invention of Kuffner for the purpose of connecting to the Ethernet network using MAC addresses and through the hub that is used as an interface.

For claim 16, Kuffner discloses an apparatus, comprising: a network interface circuit having a radio comprising two or more physical layer blocks (See Figure 1 elements 102, 104 and 106 "Communication Resource); an omnidirectional antenna to couple to said radio (see Figure 1 elements 122, 124 and 126); a processor to arrange the physical layer block to communicate according to one of at least two or more radio communication protocols (see Figure 1 element 110 "System Manager" and paragraph 0013); and beacon transceiver to transmit a beacon to a remote device (see Figure 4

elements 310 or 350 "Transceiver"), wherein a beacon transmitted by said beacon transceiver provides an indication of the one or more available radio communication protocols (see Figure 4 "User-Defined modes", See Figure 6 boxes 602 and 610 and see paragraph 0032 lines 3-5; user configures the available communication resources; inherently the user receives a beacon that has information about the availability of the communication resources, also see [0015] lines 1-6; wherein the measured or received signal quality reads on the beacon signal). Kuffner discloses all the subject matter with the exception of wherein said two or more physical layer blocks have a media access layer block being implemented at least in part by said processor. However, Allison et al teaches an Ethernet MAC chip that couples to a network (Ethernet physical layer) (see Figure 1; element 16 "Ethernet MAC chip, element 12 "Ethernet physical layer"). Thus, it would have been obvious to the one skill in the art at the time of the invention to use the teaching of Allison et al into the invention of Kuffner for the purpose of connecting to the Ethernet network using MAC addresses.

For claim 19, Allison et al discloses an apparatus further comprising a hub, and said radio including at least two or more physical layer blocks and at least one or more media access control blocks to couple to a network through said hub (see Figure 1; element 16 "Ethernet MAC chip, element 12 "Ethernet physical layer" and a hub: element 34 "Ethernet interface").

7. Claims 8 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Phillips in view of Kuffner.

For claims 8 and 13, Phillips further discloses a method wherein if a physical layer block is not currently, then programming at least one physical layer block to operate according to the desired radio communication protocol and then communicating with the remote device according to the desired radio communication protocol (see column 56-64; when the protocol has been identified, the corresponding software package is retrieved and downloaded. The details of the mobile terminal are then checked to ensure that the terminal is registered and the call is set up according to the desired protocol). Phillips discloses all the subject matter with the exception of determining whether a physical layer block is currently programmed to operate according to the desired radio communication protocol, and if so, communicating with the remote device according to the desired radio protocol. However, Kuffner discloses a method wherein a physical layer block is currently programmed to operate according to the desired radio communication protocol, and communicating with the remote device according to the desired radio protocol (see Figures 1, 4 and paragraph 0014; 102 might be by default be an 800 MHz and 104 might by default be a 1575 MHZ). Also, Kuffner suggested that these physical layer blocks (102 and 104) could be subsequently reassigned as well. Thus, it would have been obvious to the one skill in the art at the time of the invention to use the teachings of Kuffner into the invention of Phillips for the purpose of increasing the efficiency, flexibility and the adaptability of the system.

8. Claims 10 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Phillips in view of Allison et al.

For claims 10 and 15, Phillips discloses a method further comprising programming two or more physical layer blocks to communicate according to two or more radio communication protocols (see Figure 2 and column 3 lines 23-27; the system may provide access to mobile terminals using the GSM 900, DECT and DCS 1800). Phillips discloses all the subject matter with the exception of coupling the physical layer blocks to a network through a hub. However, Allison discloses the coupling of physical layer blocks to a network through the hub (see Figure 1; element 16 "Ethernet MAC chip, element 12 "Ethernet physical layer" and a hub: element 34 "Ethernet interface"). Thus, it would have been obvious to the one skill in the art at the time of the invention to use the teachings of Allison et al into the invention of Phillips for the purpose of connecting to another network through the hub such as an Ethernet network using MAC and therefore increasing the adaptability and flexibility of the system.

Allowable Subject Matter

9. Claims 9 and 14 would be allowable if rewritten or amended to overcome the objection(s), set forth in this Office action.

Response to Argument

10. Applicant's arguments filed have been fully considered but they are not persuasive.

Regarding claim 1, the applicant argues in pages 12-14 of the Remarks that the added limitations are not disclosed in Kuffner's invention. However, the examiner disagrees with the applicant because the claimed beacon transceiver is taught by the

invention of Kuffner especially in [0015] lines 1-8, wherein establishing a desired configuration, the remote station has to receive a feedback from the base station may be in form of measured or received signal quality. Therefore, the measured or received signal quality reads on the claimed beacon signal.

Regarding claims 6 and 11, the applicant argues in pages 14-16 of the Remarks that Phillips (reference) fails to show "wherein a beacon transmitted by said beacon transceiver provides an indication of the one or more available radio communication protocols". However, the examiner strongly disagrees with the applicant because in the quoted passages of Phillips (see column 3 lines 20-25); the base station provides a beacon function and access to mobile terminals using the GSM 900, DECT and DCS 1800 protocols. Therefore, the GSM 900, DECT and DCS are the desired protocols.

Conclusion

11. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

12. Examiner's Note: Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner. In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

When responding to this office action, applicants are advised to clearly point out the patentable novelty which they think the claims present in view of the state of the art disclosed by the references cited or the objections made. Applicants must also show how the amendments avoid such references or objections. See 37C.F.R 1.111(c). In addition, applicants are advised to provide the examiner with the line numbers and pages numbers in the application and/or references cited to assist examiner in locating the appropriate paragraphs.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hicham B. Foud whose telephone number is 571-270-1463. The examiner can normally be reached on Monday - Thursday 10-3 EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau T. Nguyen can be reached on 571-272-3126. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Hicham Foud
02/06/2008


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